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ABSTRACT

Conducted as the third in a series of four investigations of teacher explanation of reading skills, a study examined the relationship between explicit teacher explanation and student awareness of lesson content and reading achievement gains. Subjects were seven fifth-grade teachers and their respective low-reading ability groups. The teachers were taught how to modify basal text prescriptions for a particular skill so that students would learn to use it as a strategy for discovering meaning rather than as a memorization exercise. In addition, the teachers were taught how to organize and structure a lesson so that students were explicitly introduced to a skill, had a model to follow, and were guided in applying it in a "real text." Data were collected by means of audiotapes of lessons and teachers' perceptions of the training they had received, student interviews, and pretests and posttests of student achievement. Results support earlier findings that teachers can be trained to be more explicit in their explanations and that such explicitness is related to improved student awareness of lesson content. As in earlier studies, however, no significant improvement was found in student achievement. Materials used in the training program and study are provided in seven appendixes making up the greater part of the document. Materials include rating forms, interview protocols, criterion measures, and a graded oral reading paragraph test. (FL)

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Research Series No. 170

A DESCRIPTIVE STUDY OF TEACHER EXPLANATION: A FINAL REPORT OF THE 1983-84 STUDY

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Abstract

This paper describes the third of four studies of teacher explanation of reading skills. This descriptive study involved seven teachers who participated in a 1982-1983 experimental study. In the study the authors field-tested alternative achievement measures, worked to improve interventions with teachers, and gathered more data about the nature of instructional explanations. The procedures, analysis techniques and results are described, with particular emphasis given to those findings which were incorporated into a subsequent experimental study conducted in 1984-85. At one level, the results continue to support the earlier findings that teachers can be trained to be more explicit in their explanations and that such explicitness is related to improved student awareness of lesson content. Despite the continued failure to demonstrate significant differences in achievement test growth, the results from the criterion measures were encouraging, suggesting that a relationship between teacher explanation and student achievement will be realized when alternative measures that focus on strategic use of skills are used. Appendices provide examples of the instruments and protocols used during the study.

A DESCRIPTIVE STUDY OF TEACHER EXPLANATION: FINAL REPORT OF THE 1983-84 STUDY

Laura Roehler, Gerald G. Duffy, Linda G. Vavrus, Joyce Putnam, Eva Sivan, Cassandra Book, and Michael Meloth[1]

The Teacher Explanation Study examines the hypothesis that, given equality of opportunity to learn, teachers of low-reading groups who explicitly present the information needed to learn skills will be more effective in producing student outcomes than teachers who do not. We collected two outcome measures: (1) student awareness of what was being taught during the lesson, when to use it and how to do it and (2) reading achievement.

This line of research is distinguished from other reading instructional research in six ways. First, the student outcome is metacognitive control of the skills of reading. The skills are viewed as language conventions that govern how to get meaning from text, with the good readers consciously using reading skills as strategies to remove meaning blockages as they occur. Instruction, then, is seen as the process of providing students with information about strategic use of skills so that it can be activated when meaning blockages occur (Roehler, Duffy & Meloth, 1986). Second, because the focus is metacognitive use of skills, the outcome measure is not simply student achievement but also the students' awareness. Third, "instruction" consists of the teacher's verbal explanation of "how to do" something that students do

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[1]Laura Roehler and Gerald Duffy coordinate the Teacher Explanation Project. Both are professors of teacher education at Michigan State University. Linda Vavrus, former research assistant with the project, is an assistant professor of curriculum and instruction at Teachers College, University of Nebraska at Lincoln. Joyce Putnam, Roy Wesselman, and Cassandra Book are senior researchers with the project. Putnam and Book are professors and Wesselman an associate professor of teacher education at MSU. Eva Sivan is a research intern and Michael Meloth, a research assistant, with the project. The authors gratefully acknowledge the assistance of Gary Rackliffe in retrieving and organizing much of the data reported here.

not now know how to do (in this case, how to use skills as problem-solving strategies). Fourth, because it is easier to observe tangible gains when studying low-group readers (as opposed to high-group readers), only low-group students are studied. Fifth, the setting is the natural classroom with all its normal constraints, including existing grouping patterns, the accountability system, the mandated instructional materials, the allocated instructional time, and the abilities and beliefs of the participating teachers. Finally, we avoid the use of commercial materials, scripts, prescriptions or kits. Instead, we teach teachers how to think independently about what is to be taught and how to teach it. In a sense, we teach teachers to be strategic and metacognitive about their instruction in the same way that we want them to teach their students to be strategic and metacognitive about using skills to get meaning from text. This paper reports about the third of four studies involving teacher explanation of reading skills instruction.

Background

The basic research question for all the teacher explanation studies is as follows:

> Are low-group students of classroom teachers who are explicit in explaining how to use reading skills as strategies more aware of lesson content and better readers than low-group students taught by teachers who are less explicit?

The concepts "explicit explaining" and "student awareness" are crucially important. Both are operationally defined through the rating system used to score lesson transcripts and student interviews.

The criteria for rating teacher explicitness includes (a) *what* information the teacher provides (about the mental process being used, the reason why it would be useful, the features to attend to, the sequence to be followed,

and the clarity and consistency of the examples) and (b) *how* the teacher makes the information clear (the organization of a lesson including the model provided, the highlighting, the feedback, the review, the guided practice, and the application to connected text). See Appendix A for a copy of the rating instrument for teacher explanation.

The criteria for student awareness focus on the degree to which the students' responses to interview probes reflect metacognitive awareness of what was being taught during the lesson, why or when it would be used, and how to use it. See Appendix B for a copy of the rating instrument for student awareness.

Two studies of teacher explanation were conducted prior to the one reported here. These are briefly summarized here to establish the context for the current study.

The 1981-82 pilot study. The pilot study conducted in 1981-82 involved four second-grade teachers and their low reading groups (Roehler, Duffy, Book & Wesselman, 1983; Duffy, Book & Roehler, 1983; Roehler & Duffy, 1984). The four teachers received five individual help sessions and were observed six times during the academic year. Results indicated that, of the four teachers, one consistently obtained high explanation ratings, one improved throughout the study, one made no real change, and one was unable to use explanation techniques because of management problems. Corresponding student awareness ratings showed a strong positive relationship to the explicitness of teacher explanation. Pretest and posttest measures using the comprehension subtest of the Woodcock Reading Mastery Test suggested a relationship between explicit teacher explanation and student achievement. Descriptive findings suggested three qualitative characteristics of the most effective explanations:

(a) skills should be taught prior to the reading of the basal selection, rather than following the selection as is the case in the standard, directed-reading lesson utilized in most commercially published basal-reading textbooks; (b) an explanation should contain verbal statements that specify what the skill helps the reader do, when the skill is useful, and how to do it; and (c) once skills are explained, they should then be applied in the basal selection.

The 1982-83 experimental study. The pilot study seemed to support the basic hypothesis that explicit explanation leads to greater student awareness of lesson content and achievement. Consequently, an experimental study was conducted in 1982-83 to link empirically teacher explanation, student awareness, and student achievement (Duffy, Roehler, Meloth, Vavrus, et al., in press; Roehler, Duffy, Book, et al., 1985). Twenty-two fifth-grade teachers of low-reading groups volunteered to participate. Using ratings of their classroom management obtained during baseline observations of their reading instruction, teachers were stratified and randomly assigned to treatment or control groups. The treatment teachers participated in six, two-hour sessions focused on how to explain the use of reading skills while the control group received a two-hour lecture on classroom management techniques. The skill instruction in each of the treatment and control classrooms was then observed five times at one month intervals between November and April. All observations occurred in the natural classroom setting, every teacher used standard basal materials and each lesson focused on whatever reading skill the teacher had planned to teach on that day. The achievement measure was pretest and posttest scores on the comprehension subtest of the Gates-MacGinitie Reading Tests 2nd ed.

Results from this experimental study indicated that treatment teachers were significantly more explicit in their teaching than control teachers and that the low-group students of the explicit teachers were significantly more aware of lesson content than the low-group students of less explicit teachers. Achievement growth, however, was not significantly different for the treatment group compared to the control group. Qualitative analyses of lesson transcripts indicated that (a) the teacher's interactive role in providing spontaneous elaborations and re-explanations after assessing the students' mediation of the initial explanation was crucial to effectiveness, that (b) teachers who present the skill in the context of its immediate usefulness in the selection to be read have greater success than teachers who delay talk about the skill's usefulness until after the initial explanation and that (c) teacher talk that establishes cohesion within and between lessons is important in getting students to monitor their own comprehension routinely.

Failure to obtain significant differences between the achievement gains of treatment and control teachers was attributed to two conditions. First, treatment teachers indicated that the complexities of the classroom and the pressures of instructional mandates made it difficult for them to regularly incorporate explanation techniques into their instructional routine. Consequently, many of these teachers used explanation techniques only when they were observed. Second, the use of the Gates-MacGinitie Reading Test as the sole achievement measure may have masked growth in strategic reading ability because standardized tests tend to be global measures of reading ability that are insensitive to short-term achievement gain.

At the time we initiated this study, we had come to four major conclusions. First, our quantitative data established that teachers can be trained to be more explicit in presenting instructional information to students and

that such explicitness results in greater student awareness of lesson content; however, we were unable to establish a relationship between teacher explanation and student achievement. Second, our qualitative data led us to emphasize the importance of (a) demonstrating the usefulness of the skill early in the lesson and (b) providing explanations during the interactive phase of the lesson (and the introduction and modeling phases). Third, we began to suspect that there were qualitative differences in students' levels of awareness and that these differences might be associated with differences in the explicitness of teachers' explanations. Finally, we concluded that our methodology needed modification, particularly what outcome measures to use for measuring student achievement and what staff development strategies to use.

The 1983-84 Study

Given the results of the experimental study conducted in 1982-83, we concluded that a year was needed to field-test alternatives to the standardized achievement-test measure and to develop better ways of working with teachers that would neutralize the constraining impact of the classroom environment. Consequently, seven volunteer teachers from the 1982-83 study were studied for descriptive purposes during 1983-84.

The Research Questions

The basic research question remained the same:

> Are the low-group students of the classroom teachers who are explicit in explaining how reading works more aware of lesson content and better readers than the low-group students taught by teachers who are less explicit?

Additionally, we wanted to continue our descriptive analyses of effective and less effective explanations as a means for developing a more refined understanding of the nature of instructional explanation. Consequently, to guide qualitative analyses, we asked the following question:

What are the properties which characterize effective verbal explanations and which distinguish them from less effective ones?

Finally, we wanted to field-test changes in the procedure used to study teacher explanation. These included (a) a more comprehensive staff development model that would help teachers implement teacher explanation training despite the constraints of classroom life; (b) additional achievement measures that could supplement standardized tests as outcome measures; and (c) interview probes designed to differentiate students' levels of awareness.

Method

The procedures used in this study were consistent with those used in each of our two earlier studies (see Duffy, Roehler, Meloth, Vavrus, et al., in press). We used actual classroom teachers, provided training and coaching designed to teach them how to explain reading skills to students, and observed them six times during the academic year in the natural environment of their classrooms. During each observation, we audiotaped teachers' lessons for the low group, rated classroom management, and took field notes. Following each observation, we interviewed five students from the observed low-reading group individually about what they learned, when they would use it, and how to do it. We then rated the transcripts of the teachers' lessons, the transcripts of the students' postinstruction interviews, and recorded the students' scores on achievement measures.

During the research, a researcher assigned to each teacher acted as coach and data collector. For the assigned teacher, the researcher collected pre- and postachievement data, attended training sessions to help the teacher, observed the teacher periodically throughout the academic year, provided coaching feedback, conducted the student interviews following the observations, collected some of the ongoing achievement measures and conducted two

formal interviews with the teacher to determine knowledge of explanation and perceptions of the difficulties in implementing it. Additional procedures that distinguished this study from the previous two are described below.

Sample. Seven fifth-grade teachers and their respective low-reading groups participated in the 1983-84 study. All the teachers had been participants in the 1982-83 experimental study of 22 fifth-grade teachers, 3 as treatment teachers and 4 as control teachers. All taught in different buildings in the same large midwestern school district in which the experimental study was conducted. As in the previous experimental study, the students in the teachers' respective low-reading groups were considered to be comparable because of the existence of a busing system that tended to distribute students of various socioeconomic backgrounds equally throughout the schools in the district.

In addition to the smaller number of teachers studied, the instructional context in which the teachers worked was different in 1983-84. The participating school district had adopted a new, district-wide basal reading textbook program that all teachers were required to use. This differed from the 1982-83 study when teachers had been free to choose from among several basal textbooks.

The teacher intervention. Consistent with the staff-development procedures established for the 1982-83 study, researchers intervened with teachers in after-school staff development sessions. These sessions focused on teaching the teachers (a) how to modify basal text prescriptions for the skill being taught so that students would learn to use it as a strategy for removing a blockage to meaning rather than as a memorized procedure to be applied in skill exercises; (b) how to organize and structure a lesson so that

students were explicitly introduced to the skill, had a model to follow, and were guided in applying it; and (c) how to help students use the skill in real text (as opposed to artificial text such as ditto sheets and workbook pages). There were, however, two major differences in the 1983-84 intervention.

First, while the intervention began with an overview session on teacher explanation, subsequent sessions focused on how to explain four specific skills (structural analysis, punctuation, context, and main idea) rather than having teachers teach whatever basal text skill occurred next in their respective basal textbooks. During each training session, researchers provided conceptual background knowledge regarding how the target skill could be taught as a strategy, showed a videotape in which the planning and teaching of that particular skill was demonstrated, and coached the participating teachers as they initiated the planning of the actual lesson they would subsequently teach. For the training session on structural analysis, for instance, the researchers showed the teachers how a skill on prefixes could be presented to students as a strategy to use when encountering an unknown word, how to model the thinking good readers go through when using prefix strategies to figure out unknown words, and how to provide opportunities for guided practice, elaborated explanation and application.

Second, the original staff development model used to train the teachers in the 1982-83 study, described by Roehler, Wesselman and Putnam (1983), was refined. Four principles were emphasized: (a) provide explicit information about what you want the teacher to do; (b) provide an explicit rationale concerning why it is important for the teacher to learn the content; (c) provide a model of the new *thinking* involved (as opposed to simply modeling the behavior that results from the thinking); and (d) provide opportunities for the teacher to practice the new thinking, as well as the behaviors, while

receiving feedback from a coach. To develop these principles, each intervention session was organized in an eight-step format: (a) present what is to be learned; (b) present the rationale as to why it is useful for the teacher to learn it; (c) model the new thinking involved; (d) model the teaching behaviors that result from the thinking; (e) monitor the teachers' planning of the next lesson and provide feedback; (f) observe the teachers' implementation of the lessons in the classroom; (g) provide immediate feedback about the implementation of the lesson; and (h) supplement this with additional individual feedback (using transcripts of the teachers' lessons as the reference point) at the beginning of the next intervention.

Data Collected

Data collected included audiotapes of lessons for the teachers' explanations, audiotapes of interviews for student awareness, pretests and posttests for student achievement and audiotaped interviews recording the teachers' perceptions of teacher explanation and the training they had received. Each of these is described below.

Teacher explanation data. As in previous studies, data on the teachers' explanations were collected by audiotaping the teachers' explanations during low-group reading instruction, transcribing these, and having trained raters score them according to the rating system developed by the researchers for the previous year's experimental study (see Appendix A). The procedures for training raters and scoring transcripts remained unchanged. Interrater reliability for the rating of the teachers' explanations was .90.

Student awareness data. As in previous years, researchers collected student awareness data by selecting students from the low-reading group to be

interviewed following instruction, transcribed the interviews, and had trained raters score them for student awareness of lesson content using the rating instrument developed by the researchers in the previous study (see Appendix B). While the concept of awareness was essentially the same as in the previous study, modifications in the procedures for collecting awareness data were made based on noted differences in the quality of student awareness in the previous study. First, student selection procedures differed. Instead of interviewing the same students on all five occasions, three low-group students were identified as target students at the beginning of the study and were interviewed each time. Two additional interviews were conducted with students chosen at random from among the remaining members of the low group.

Second, the interview itself was restructured to reflect three perceived levels of awareness. Rather than simply asking each student three questions about what was learned, when it would be used, and how to do it, students were first given a general probe (Level I) to describe "everything you can remember about today's lesson." This probe was followed by the three questions about what was taught, when it would be used, and how to do it (Level II). Finally, if unable to answer the questions at Level I and II, the students were given an example from the lesson itself and were again asked what was taught, when it would be used, and how to do it (Level III). A copy of the revised protocol used by the interviewers is included in Appendix C.

Raters were trained to score student-interview transcripts using basically the same procedures as in the previous study. Randomly selected transcripts from the 1982-83 study were used for rater training. All raters rated the same transcripts and then discussed their ratings to agree on conventions governing scoring. At this time, raters also piloted the rating of interviews by levels of awareness. They scored each student's responses at

each level and then made the highest rating achieved for a particular category across levels the student's rated score for that category. Interrater reliability was obtained for the overall scores only. For this study, the interrater reliability for the student rating was .83.

Achievement data. Two changes were made regarding student achievement data. First, rather than using the Gates-MacGinitie Reading Test as we had the previous year, we used the Standford Achievement Test, which is administered every spring by that school district. Second, as a supplement to the standardized achievement test, two additional measures were developed and field-tested. The first consisted of paper and pencil tests of student performance on each of four specific skills taught by each teacher (i.e., structural analysis, punctuation, context, and main idea). Copies of these criterion measures appear in Appendix D. The second measure was a Graded Oral Reading Paragraph administered on a trial basis to selected students at the end of the academic year. This test consisted of a paragraph taken from the Houghton Mifflin Placement Test. Students were asked to read it orally. They were then asked questions about their self-corrections and about certain words imbedded in the text to determine whether or not they were using skills as strategies when reading. A copy of this measure and the accompanying scoring sheet for the tester are included in Appendix E.

Teacher interview data. As in the 1982-83 study, teacher interview data were collected twice during the year. The first interview occurred at the approximate midpoint of the study (during January) and the other at the conclusion of the study (in June). The questions posed during the interviews aimed at eliciting information in two general areas: (a) data concerning

teachers' understanding of the nature of teacher explanation, refinements they might be making that would give insight into the qualitative nature of the explanation process, and special techniques they might be using (such as questioning) and (b) information about the teachers' perceptions of the value of the intervention and the degree to which they were implementing the training they received. The interview protocols are provided in Appendix F.

Schedule of Lesson Observations and Data Collection

We collected lesson data at six points during the academic year. First, we made baseline observations of the teachers' reading skill instruction and management of task engagement. The management observation form and the procedures for observing were the same as those employed in the previous year's study (see Roehler, Duffy, Book, Meloth, Vavrus, et al., 1985).

Following the baseline observation, each of the seven teachers were observed five times. The first four of these were observations of the specified skills noted above that had been demonstrated and planned in a training session conducted one or two weeks prior to each observation. The first of these was a structural analysis lesson (teaching students to use prefixes and suffixes to figure out word meaning), the second, a punctuation lesson (teaching students to figure out text messages by reference to punctuation cues), the third, a context clue lesson (teaching students to figure out word meaning by reference to the words around the unknown word), and the fourth, a main idea lesson (teaching students to figure out the gist of a selection by reference to the main idea). After the four specific skill lessons had been taught, we observed each of the teachers a final time. For this lesson, teachers were given personal choice in deciding what skill to teach. It is worth noting

that in all cases this selection reflected the next skill prescribed in the basal sequence.

Data Analysis

We conducted three kinds of data analysis, consistent with the three major purposes of the study. The first was quantitative and tested the basic hypothesis of the study regarding the effect of teacher explanation on student awareness and achievement. The second was qualitative and focused on the descriptive characteristics of effective explanation. The last was an evaluation of the new, field-tested techniques that might be used in future experimental studies.

To answer the basic research question, analysis of variance procedures were used. First, we compared the explanation ratings of the three teachers who had been treatment teachers in 1982-83 with those of the four teachers who had been control teachers to determine if there were significant differences in the explicitness of the explanations of the two groups. Second, we compared the awareness rating of the low-group students taught by the 1982-83 treatment teachers to the awareness ratings of the low-group students taught by the teachers who had previously been control teachers. Finally, we compared the achievement of the low-group students of the former treatment teachers with that of low-group students of the former control teachers.

To conduct the qualitative analysis, socioethnographic techniques similar to those described by Green and Wallat (1981) were used. The more and less effective of the seven teachers were identified. We analyzed the lesson transcripts of the more effective teachers and identified characteristics of their explanations. We then analyzed the lessons of the less effective teachers and identified characteristics of the explanations. By comparing the

characteristics associated with the effective and less effective teachers, and also by comparing a single teacher's most effective lesson with her less effective lessons, we constructed descriptions of elements characterizing effective explanation.

We conducted similar qualitative analyses of the new methodology we had field-tested during the study. We examined the results of the alternative achievement measures and the level of awareness interviews to see if these measures yielded more information about student gains than the procedures used the previous year. We evaluated the staff development model with feedback from teachers interviewed at the close of the academic year.

Results

Results of this study are presented in three sections. The first reports the quantitative findings about the basic research question. The qualitative analyses regarding the nature of instructional explanation is reported in the second section. The final section reports the results of the field-testing of alternative achievement and awareness measures and of a modified staff development model.

Quantitative analysis. The basic research question focused on the relationship between explicit teacher explanation and student awareness and achievement outcomes. The basic measure of the teachers' explanation was the score each lesson received when rated by trained raters using the instrument developed for that purpose (see Appendix A). The measure of the students' awareness was the score each interview received when rated by trained raters using the instrument for determining student awareness (see Appendix B). Two measures determined achievement. The first were the pretest and posttest scores on the comprehension subtest of the Stanford Achievement Test (SAT).

The second were the scores on multiple-choice tests of skill knowledge administered following the four specific skill lessons taught by each teacher.

We conducted an analysis of variance of the seven teachers' explanation ratings to determine whether significant differences existed in their explanations. The analysis revealed that while the 1982-83 treatment teachers had higher explanation ratings (X = 15.00) than the control teachers (X = 10.00) on the first observation, these differences were not significant ($F(1,6)$ = 1.061, p = .350).

Ratings of explanation for each of the subsequent observations revealed that teachers were similar, with the differences between group means for the sixth and final observation being 19.00 and 16.50 respectively ($F(1.6)$ = .974, p = .369). This suggests three things. First, the 1982-83 treatment teachers continued their high level of explanation into the 1983-84 academic year. Second, as was the case in 1982-83, staff development had an immediate impact on the level of explanation for all recipients of the intervention. Third, the rating instrument was unable to capture fine distinctions in quality of explanation.

The analysis of student awareness ratings between groups indicated that, for the baseline observation, students of the 1982-83 treatment teachers were not significantly more aware than control group students (Ft = 6.46, F = 4.23; $F(1,6)$ = 5.072, p = .074). The students of the 1982-83 treatment teachers continued to have slightly better awareness ratings throughout the 1983-84 year, but none of these were significantly different than the ratings received by the students of the 1982-83 control teachers (e.g., for Observation 6, Ft = 7.60; Fc = 6.21; F (1,6) = 1.688, p = .251). These results suggest that with training both groups of teachers were able to generate awareness of lesson content. In contrast, the awareness ratings of the students of Control

teachers during 1982-83 (when they received no training on how to explain) had been considerably lower ($\bar{X}$ = 4.22).

Regarding achievement, comparisons were made for both growth on the comprehension subtest of the SAT (1983 performance vs. 1984 performance) and the measures developed for use in this study. The analysis of the SAT scores revealed no significant differences between groups (F (1,6) = .029, p = .873). Because both groups received the training, we did not expect that there would be any differences.

Similarly, few differences existed between the two groups of teachers on the four criterion measures administered throughout the year. The only instance of significant differences occurred following the fifth observation, when the 1982-83 treatment teachers were significantly better than their control group counterparts (F (1,6) = 17.146, p = .009). Again, because both groups received training, no differences were expected. We did, however, expect that teachers who received high explanation ratings would also tend to have students who received high awareness ratings and scored better on the measures of skill achievement. As shown in Table 1, these relationships were obtained. Teacher number 14 (who received the highest average explanation ratings of 20 out of a possible 22 points) had students who received the highest average awareness ratings and the highest average scores on criterion measures, and, as the explanation ratings of the other teachers go down, the awareness and achievement scores for their students also go down proportionately.

The limited number of subjects and the fact that all received the same training made it difficult to establish significant correlations among variables. Nevertheless, comparisons were made between explanation and awareness, between awareness and the criterion measures, and between awareness and the

Table 1

Average Ratings
of Teacher in the 1983-84 Study

Teacher (#)	Explanation (Rating Scale up to 22)	Awareness	Achievement %
14	20.00	9.75	73.0
19	19.25	7.16	66.0
18	18.00	6.63	75.0
2	17.25	6.84	54.6
12	16.25	5.66	69.2
21	13.5	4.88	67.2
11	12.75	4.99	64.0

SAT scores. The results indicate that significant correlations exist between explanation and awareness for the second r = .9312, p = .001) and third observation (r = .808, p = .014); that correlations between awareness and the criterion measures approached significance for the sixth observation (r = .668, p = .051); and that a high but nonsignificant correlation exists between the average awareness scores for Observations 5 and 6 and the SAT scores r = .647, p = .058). These correlations suggest that a relationship might exist between teacher explanations, student awareness, and student achievement.

Qualitative Analysis

To address the research question regarding the nature of instructional explanation, we analyzed the transcripts of lessons taught by effective and less effective teachers. This analysis resulted in two major sets of qualitative findings, reported in two separate papers.

The first conceptualizes the nature of explanation (Duffy, Roehler, Meloth & Vavrus, in press). The paper emphasizes the interactive nature of explanation in which both the teacher and the students act as mediators. The student mediates instruction in the sense that the teacher's explanation is processed through the student's prior knowledge and, on the basis of that prior knowledge, is restructured so the student can make sense of it.

The teacher is a mediator of instruction in the sense that he/she builds bridges from the student's prior knowledge to the new knowledge, often through explicit modeling but also through spontaneous responses to the student's restructuring during the interactive stages of the lesson. Hence, rather than simply being explicit early in a lesson by introducing and modeling, verbal explanation is also characterized by (a) an expectation that students will restructure what the teacher says; (b) a readiness to respond spontaneously to such restructured understandings in a way consistent with the intended curricular outcome; (c) an expectation that the desired outcome is not a simple automatized response but an awareness that empowers students by putting them in control of the process of making sense out of text; (d) an emphasis on information-giving, particularly information emphasizing declarative, conditional and procedural knowledge that is presented in conceptually accurate, precise and explicit ways within an overall classroom framework which builds concepts about the usefulness of reading and reading skills; and (5) a responsiveness to students that includes the willingness and ability to provide "hooks" which are embedded in the lesson structure and in statements made during instructional interactions as a means to guide students' restructuring toward the outcome intended by the teacher.

The second paper based on our qualitative analysis describes the subtlety of instructional explanation (Duffy, Roehler, & Rackliffe, in press). Two

teachers, both of whom received training during the study reported here, received high explicitness ratings for the lessons they taught. In this sense, both looked as if they were successful explainers. However, their students' awareness following instruction was quite different. One teacher's students received high awareness ratings (and high achievement). The other teacher's students received noticeably lower awareness ratings (and had lower achievement). When examined, the lesson transcripts revealed that, despite the fact that the teachers taught the same skills using the same training, they conveyed qualitatively different messages to students.

The first teacher described the skill as a cognitive process requiring flexibility and adaptation whereas the second described the skill as a name (or label) to be learned together with a rigid set of steps to be memorized. Once the lesson began, the first teacher provided assistance in how to reason with the skill whereas the other expected immediate answer accuracy. In short, both teachers were explicit (and, hence, received high explanation ratings); however, they were explicit about different things.

The result was that the students in the first teacher's classroom became aware of how to use skills as strategies and improved their achievement through using them whereas the second teacher's students became aware of the name of what they were learning and could recite the steps to follow but could not apply them to real reading tasks. Although casual visitors to the classrooms of these two teachers would observe that they were doing the same thing and comment on their respective explicitness in explaining, the two lessons were actually quite different.

Another paper based on interview data collected from the teachers at the end of the academic year (Duffy & Roehler, 1986) explicated these subtle

distinctions. In these interviews, teachers expressed difficulty with two aspects of the explanation task--a conceptual difficulty with the idea of strategies themselves and a difficulty in accommodating the training to an environment already crowded with constraints. It is the conceptual issue which is most relevant here. Apparently, teachers have difficulty conceptualizing both the differences between skills and strategies and the implications strategies have for how one reads and for how one teaches reading.

A major consequence of these qualitative analyses was the revision of the rating instrument for teacher explanation. We made two major kinds of revisions. First, we refined the subcategories under Part I (the information the teacher presented) and Part II (the way the information is presented) and added Part III on lesson cohesion to reflect our emerging understanding of what constitutes explanation of skills as strategies. Under the new Part I, the subcategories were changed to focus on what the teacher says about what strategy is being taught, how it would be useful, how to select it from among a repertoire of strategies, and how to use it once it is selected. Under the new Part II, the categories were changed to focus on the lesson introduction, the presentation, the teacher-student interaction and the closure. The new Part III on cohesion focused on intralesson and interlesson cohesion.

The second major revision was in the scale itself. The range of obtainable scores per category was expanded from 0-2 points (which noted mere presence or absence of criteria) to 0-4 points (which reflected degrees of presence or absence of criteria). By expanding the range, the instrument more accurately reflected the subtleties of instructional explanation. See Appendix G for a copy of the revised form.

Field Testing

The 1983-84 study was conducted, in part, to field-test new measures and a revised staff development intervention. Two sets of data were used to determine the success of the field-testing, one for each of the major emphases.

First, to determine whether or not the new measures assessed differences in strategic knowledge, we examined them to see if they helped discriminate between the teachers in the expected way (i.e., that there would be an observable relationship between the explanation rating, the awareness rating, and the achievement score and that the achievement scores would generally be higher for the teachers who received the highest explanation and awareness ratings and lowest for those who received the lowest). As seen in Table 1, this relationship was generally evident. However, despite the apparent relationship between the explanation ratings and the criterion measure results, it was decided ultimately that the criterion measures still did not directly measure the students' use of strategies and that it would be necessary to develop measures that not only measured student competence with the skill but also measured whether or not they consciously apply the skills in strategic ways.

Similarly, we examined randomly selected student interview responses to determine if qualitative differences existed in the levels of student awareness and achievement. For instance, the interview responses were analyzed to determine if students receiving high awareness ratings on Level I (general probe) tended to receive higher achievement scores than those who received low awareness ratings on Level I but received high awareness ratings on Level II or Level III. This analysis revealed a pattern indicating that such a relationship might exist, suggesting that future awareness interviews should be

structured to include the three levels, and raters should be trained to score interviews on levels of awareness.

To determine the effectiveness of the staff development modification, we conducted teacher interviews at the end of the academic year and asked teachers, among other things, their responses to the training they had received (see Appendix F for the interview protocol used by interviewers). The responses to these questions were generally positive, indicating support for the altered intervention. The teachers, however, made some suggestions and observations about further changes that could improve the staff development model for training them: (a) provide the bulk of the intervention sessions early in the school year in order to allow maximum time for classroom application; (b) allow more peer interaction during intervention sessions; (c) provide more assistance on how to do task analyses of students' cognitions associated with strategic use of skills; (d) provide more tangible assistance on how the information in the intervention can be integrated into basal textbook programs; and (e) provide closer monitoring of the use of explanation behavior in classrooms.

An unanticipated benefit of the teacher interviews was the insight it provided us about why some teachers implement the training provided during interventions and why some do not (Duffy & Roehler, in press). In our analysis of the comments teachers made about their implementation, we found that some teachers seemed to be affected more by the constraints of their environment than others. We speculate, as a result, that the environmental constraints associated with classroom life have varying impacts on different teachers, with some teachers exerting a metacognitive control over their environment and others being dominated by their environment. Those having metacognitive control use new professional knowledge flexibly; those who are

dominated by the constraints of the environment, however, translate training into proceduralized mimicry in order to implement it. Helping teachers gain control of their environment so they can use knowledge flexibly rather than rigidly has become a major focus of our intervention efforts.

Conclusion

This paper describes the third of four studies to determine the relationship between explicit teacher explanation and student awareness and achievement outcomes. This small-scale and descriptive study aimed to develop a better understanding of the nature of explanation itself and of the difficulties associated with interventions in the natural environment of real classrooms over long periods of time. At one level, the results continue to support the earlier findings that teachers can be trained to be more explicit in their explanations and that such explicitness is related to improved student awareness of lesson content. Despite the continued failure to demonstrate significant differences in achievement test growth, the results from the criterion measures were encouraging, suggesting that a relationship between teacher explanation and student achievement will be realized when alternative measures that focus on strategic use of skills are used.

In preparing for a subsequent experimental study, the descriptive study of 1983-84 served as a significant pivot point on teacher explanations in four ways. First, the concept of explanation itself changed with the result that we began to study a more interactive, fluid, and subtle concept than we had in earlier studies. Second, our concept of student awareness became more sophisticated, including not only the presence and/or absence of awareness but the possibility of degrees of awareness that could be identified by providing differential interview probes. Third, our concept of achievement broadened, with

the result that we began testing the possibilities not only for alternatives to standardized measures but, also, for new measures that assessed the students' strategic thinking associated with the use of that skill. Finally, we began to attend more closely to the subtleties of the intervention with teachers, with the result that the staff development model received as much attention as the content of the intervention itself. These basic conceptual changes became fundamental tenets of the subsequent experimental study conducted in 1984-85.

In a global sense, however, the most valuable contribution of this study lies with its contribution to our understanding of how to conduct naturalistic intervention studies of teachers' instructional practice. While much remains to be learned, we now know more about how to conduct this kind of extremely complex and difficult research. Since our ability to ultimately translate research into practice depends upon our ability to help teachers in the environment of their world, this study is significant for that contribution alone.

References

Duffy, G., & Roehler, L. (1986). Constraints on teacher change. Journal of Teacher Education, 37(1), 55-59.

Duffy, G., Book, C., & Roehler, L. (1983). A study of direct teacher explanation during reading instruction. In J. Niles & L. Harris (Eds.), Searches for meaning in reading: Language processing and instruction. (32nd yearbook of the National Reading Conference, p. 295-303). Rochester, NY: National Reading Conference.

Duffy, G., Roehler, L., Meloth, M., & Vavrus, L. (in press). Conceptualizing instructional explanation. Teaching and Teacher Education.

Duffy, G.G., Roehler, L.R., Meloth, M.S., Vavrus, L., Book, C., Putnam, J., & Wesselman, R. (in press). The relationship between explicit verbal explanation during reading skill instruction and student awareness and achievement: A study of reading teacher effects. Reading Research Quarterly.

Duffy, G., Roehler, L., & Rackliffe, G. (in press). How teachers' instructional talk influences students' understanding of lesson content. Elementary School Journal.

Green, J., & Wallat, C. (1981). Mapping instructional conversations. In J. Green & C. Wallat (Eds.), Ethnography and language in educational settings, (pp. 161-209). Norwood, NJ: Ablex.

Roehler, L., & Duffy, G. (1984). Direct explanation of comprehension processes. In G. Duffy, L. Roehler, & J. Mason (Eds.), Comprehension instruction: Perspectives and suggestions (p. 265-280). New York: Longman.

Roehler, L., Duffy, G., Book, C., Meloth, M., Vavrus, L., Putnam, J., & Wesselman, R. (1985). Teacher explanation during reading instruction: A technical report of the 1982-83 study (Research Series No. 158). East Lansing: Michigan State University, Institute for Research on Teaching.

Roehler, L., Duffy, G., Book, C., & Wesselman, R. (1983). Direct teacher explanation during reading instruction: A pilot study (Research Series No. 132). East Lansing: Michigan State University, Institute for Research on Teaching.

Roehler, L., Duffy, G., & Meloth, M. (1986). What to be direct about in direct instruction in reading: Content-only versus process-into-content. In T. Raphael (Ed.), Contexts of school-based literacy, (pp. 79-95). New York: Random House.

Roehler, L., Wesselman, R., & Putnam, J. (1983). A descriptive study of the process of teacher instructional change in reading. In J. Niles & L. Harris (Eds.), Searches for meaning in reading: Language processing and instruction. (32nd yearbook of the National Reading Conference, pp. 329-334). Rochester, NY: National Reading Conference.

Appendix A

Rating Form for Explanation

Revised October 14, 1983
1983-84 RATING TEACHER EXPLANATION

Teacher explanation is rated in two ways. The first focuses on the information the teacher presents about the mental processing required to do the task. The second focuses on the means by which the teacher makes clear the information being presented. Do not rate explanation based on what you believe is implied by the teacher. Rate on the basis of explicit evidence only.

Part I: The Information Presented About the Mental Processing Involved in Successfully Doing the Task

1. Rate how clearly, consistently and explicitly the teacher describes the mental processing to be used when doing the skill/strategy.

   0 -- it is hard to tell what mental process the teacher wants students to use when doing the task.

   1 -- a mental process can be discerned, but it is vague, inconsistent or implicit rather than clear, consistent and explicit.

   2 -- the mental process the students are to use in doing the task(s) is clearly, consistently and explicitly stated.

2. Rate how clearly, consistently and explicitly the teacher states the reason why the skill/strategy would be immediately useful to students as they read.

   0 -- there is no explanation of why the skill/strategy would be useful or the reasons do not relate to immediate usefulness.

   1 -- reasons for learning the skill/strategy are stated but are unclear or inconsistent or implied.

   2 -- clear and explicit reasons for immediate use of the skill/strategy are stated without contradiction.

3. Rate how clearly, consistently and explicitly the teacher describes the features to attend to when doing the mental processing associated with the skill/strategy.

   0 -- the teacher does not talk about features to attend to when doing the mental processing associated with the skill/strategy.

   1 -- the teacher talks about the features to focus on when doing the mental processing but the explanation is incomplete, unclear or implied.

   2 -- the teacher's description of the features to focus on when doing the mental processing is clear, consistent and explicit.

4. Rate how clearly, consistently and explicitly the teacher states the sequence to be followed when doing the mental processing associated with the skill/strategy.

   0 -- the teacher does not talk about the sequence to follow but the explanation is incomplete, unclear or implied.

   1 -- the teacher talks about a sequence to follow but the explanation is incomplete, unclear or implied.

   2 -- the teacher's talk about the sequence to follow in doing the mental processing is clear, consistent and explicit.

5. Rate the clarity and consistency of the example(s) the teacher provides or elicits regarding how to do the mental processing associated with the skill/strategy.

   0 -- no example of the mental processing is provided or elicited.

   1 -- an example of the mental processing is provided (or elicited) but it is incomplete, unclear or the process to be employed is implied.

   2 -- a clear, explicit and consistent example of the mental processing is provided (or elicited).

Part II: The Means By Which the Teacher Makes Clear the Information Presented

A. Explanation of Information

1. Expository Explanation

a. How explicitly does the teacher state the what, the why and the how (the features to attend to) associated with the skill/strategy being taught?

   0 -- the teacher makes no explicit statements about what, why, and how.

   1 -- the teacher makes an explicit statement about one of the three but not all three or makes statements about all three but it is not explicit and/or clear.

   2 -- the teacher makes explicit statements about what, why and how.

b. How explicitly did the teacher model how to do the mental processing to be used in completing the task?

0 -- the teacher neither models nor demonstrates mental processing.

1 -- the teacher demonstrates the mental processing but the demonstration is unclear or inconsistent and it does not qualify as a model ("do as I do").

2 -- the teacher provides a clear model of how to do the mental processing.

2. Interactive Explanation

a. How explicitly does the teacher elicit student responses which call for the mental processing associated with the skill strategy?

0 -- the teacher does not elicit responses which call for the mental processing and does not highlight or cue students to the features to attend to.

1 -- there is some evidence that the teacher elicits responses which call for the mental processing and highlights or cues, but it is not explicit or clear or consistent.

2 -- the teacher explicitly elicits responses which call for the mental processing and highlights or cues students to the features of the mental processing.

b. How explicitly did the teacher's feedback to student responses re-focus attention and/or elaborate on how to do the mental processing required to complete the task?

0 -- the teacher's feedback to students is confined to correctness criteria and/or there is little evidence of specific or elaborative responses to students and/or the teacher's feedback is confusing.

1 -- teacher's feedback to students is intended to focus (or re-focus) students on how to do the mental processing but is not explicit or consistent.

2 -- teacher feedback to students focuses on how to do the mental processing and, when confusion arises, the teacher re-focuses student attention through appropriate elaboration.

B. Practice - Application

1. Did the teacher provide students with independent or guided practice which calls for use of the mental processing in a controlled sample (workbook page, ditto sheet, etc.)?

   0 -- the teacher did not provide practice or it is not appropriate to the mental processing.

   1 -- the teacher provides practice but it does not elicit responses which call for the mental processing associated with the skill/strategy.

   2 -- the practice provided by the teacher calls for repeated opportunity to use the mental processing associated with the skill/strategy.

2. Did the teacher help students apply the mental processing in connected text (i.e., basal text stories or real life situations where the mental processing would be useful) or talk to students about doing such guided application in the near future?

   0 -- the teacher does not provide any help regarding the application of the mental processing in connected text and does not talk about doing so in the near future.

   1 -- the teacher attempts to help students apply the mental processing to connected text (or talks about doing so in the near future) but such help is not concrete and/or specific in terms of either text or situation.

   2 -- the teacher provides explicit help to students in applying the mental processing to connected text, specifying both the text and the situation.

Appendix B

Rating Form for Student Awareness

of Lesson Content

RATING PUPIL AWARENESS

Determine pupil awareness by judging pupil response to the three interview questions and all subsequent elaborating probes which the researcher may have used in conjunction with each question. The criteria for pupil awareness follow.

1. A highly rated response to the question about "what" was being taught must include a specific reference to the process involved in completing the task and an example:

   0 -- No awareness (student does not know, is inaccurate or supplies a response that does not make sense).

   1 -- The response is a non-specific reference to the task ("We are learning about words.").

   2 -- The response refers to the name of the specific task which can be done successfully if the process is applied correctly or is an example of what can be done ("We are learning ou words.").

   3 -- The response includes a specific reference to the process being learned ("We are learning how to sound out ou words.").

   4 -- The response includes a specific reference to the process and an example ("We are learning how to sound out ou words, like in out.").

2. A highly rated response to the question about "why" or "when it would be used" must specify both the context in which it will be useful and what he/she is able to do in that context:

   0 -- No awareness or includes no reference to the specific task ("I'll get smarter" or "It'll help me when I grow up.").

   1 -- The response is not specific to the task but is related to reading language generally (I'll read better.").

   2 -- The response refers to an appropriate general category but not to the specific use for what was taught ("I can sound out words better.").

   3 -- The response includes specific reference to what he/she will be able to do but not the context in which it would be useful ("I can sound out ou words.").

   OR

   specifies the context in which it would be useful but not what he/she will be able to do ("I can use this when I come upon an unknown word in my book.").

4 -- The response includes both what he/she will be able to do and the context in which it is useful ("When I come upon an unknown ou word in my library book, I'll be able to sound it out.").

3. A highly rated response to the question about "how do you do it" must include an example of how one does the mental processing associated with successful completion of the task or an appropriate sequence of steps to be followed.

0 -- No awareness.

1 -- The response is not specific to the mental processing to be used ("I'll sound the word out.")

OR

is merely an example that does not illustrate conscious understanding of the mental processing to be used ("loud").

2 -- The response refers to features to attend to but not to the way they are used in doing the mental processing ("I say, 'l-ou-d.'").

3 -- The response identifies some of the features to attend to and some understanding of the mental processing ("If I see a word that has ou in it, I say the sound of ou.").

4 -- The response includes a sequence of steps or a specific example of the mental processing ("When I meet an unknown word such as loud, I think first .... and then ...." etc.).

Appendix C

Revised Interviewer Protocol for

Conducting Interviews Measuring Student

Awareness of Lesson Content

Date_____ TCH CODE_____ OB CODE_____

WHAT
Reference to process and example

WHY
What he'll be able

HOW
An Accurate Sequence of steps or an example of how to do it.

	1	2	3	4	5

II. Introduction for routine interviews
SAY: Hi _____. How are you today? Do you remember when I asked you some questions? Good. Well, today we're going to talk again. First... (begin with general question)

III. General Question - Level 1
(Either question can be used)

1. Tell me everything you remember about the lesson you just had._____
2. Tell me all that you can about the lesson I just saw._____

PROMPTS (use prompts frequently): Tell me more._____
Was there anything more?_____
Tell me more about that._____

RESPONSES: Thank you. That helped me understand what your class was about.

These are acceptable responses to pupil's EFFORTS. They may be used at any time. Do not evaluate correctness of pupil's answer.

IV. Specific Questions - Level 2
(The questions under what, how, and why are not in hierarchical order. More than one question may be used, but not all have to be used.)

A. What?
1. Can you tell me what the lesson was about?_____
2. What were you learning to do in the lesson today?_____

B. How?
1. How did you do it?_____
2. How did you know what to do?_____
3. How do you decide (what to do)?_____
4. Pretend your best friend is sick today and s/he didn't come to school. How would you teach your friend about_____?_____
5. How did you find the right answer?_____

C. Why?
1. Why do you need to be able to do that?_____
2. How would learning that help you?_____
3. You know how to ____, when would you use it? _____
If student says in learning or reading, ask: How would it help you in reading?_____

	1	2	3	4	5
V. Specific Questions - Level 3 These questions are asked in conjunction with the presentation of a concrete example. Only the HOW question must be asked at this level. If the interviewer has any doubts about the adequacy of the previous responses, then s/he should use this level for the WHAT and WHY questions as well.					
PLEASE NOTE: TWO ADDITIONAL QUESTIONS HAVE BEEN ADDED. THEY ATTEMPT TO IDENTIFY WHETHER THE STUDENT HAS INTERNALIZED THE IMPORTANCE OF LEARNING THE SKILL. THE TWO QUESTIONS, LOCATED AFTER THE "WHY" QUESTIONS, MUST BE ASKED..					
Say: Good. Now this is an example of the work you were doing in class today. Could you tell me...					
A. What?					
1. What were you learning to do in the lesson?_____					
2. What did your teacher teach you in your reading lesson today?_____					
3. What is this worksheet about?_____					
B. How?					
1. Can you tell me how you got the answer?_____					
2. How did you ___ ? (whatever the pupil has learned) _____					
3. Show me what you would do to get _____._____					
C. Why?					
1. What will learning about ____ help you do?_____					
2. How might this help you in reading?_____					
D. EXTRA					
1. Why did the teacher say this is important to learn?_____					
2. Why do you think it is important to learn?_____					

VI. Perceived Reading Competence

SAY: You've done a good job answering those questions. There's one more easy thing I want you to do. Here's a ladder. The top of the ladder is where the best pupil in your reading group sits. On the bottom is where the worst one sits. Where do you think you would sit? Okay, will you mark it please?

VII. Closing

Give positive feedback for effort

Suggestions: Good. You've really been helpful, thanks. Thanks for helping me to find out more about teaching reading. See you again.

Appendix D

Criterion Measures Used in the 1983-84 Study

Criterion Measure
Structural Analysis

If the meaning of the underlined word can be figured out using a suffix, draw a line between the suffix and the root and write the meaning of the word on the line under the sentence. If the meaning of the underlined word cannot be figured out using a suffix, skip it and go to the next one.

Example: The wooden bowl fell off the table.

_____

1. The boy felt foolish when he put on the funny hat.

_____

2. The horse was in the stable.

_____

3. The girl's face looked greenish.

_____

4. The cowboy felt the noose tighten around his neck.

_____

5. The man was hopeful that the plan would work.

_____

6. The family was eating dinner at the table.

_____

7. The scientist was working hard to find the answer.

_____

8. The woman was walking happily down the street.

_____

Criterion Measure
Main Idea
Skylights

DIRECTIONS: Read each paragraph below and write:

1. the topic of the paragraph (what is being talked about)
2. the author's main message about the topic (what the author wants you to understand about the topic).

1. There is a kind of fish that does something most fish can't do. This fish can move both in water and on land. That is why it is called the walking catfish. If the water where it lives happens to dry up, this fish will go to find more water. It moves across the ground by pushing itself along with its tail. The walking catfish can even stay out of water for more than a day!

   What is being talked about in the paragraph? _____
   _____

   What does the author want you to understand about the topic? _____
   _____

2. Each summer Ralph goes to live by the sea. Each day he goes out in his small boat. Often he puts a line in the water to get some fish. Sometimes he pulls up his traps to see if there are lobsters inside. On some days, he goes swimming and then falls asleep on the beach.

   What is being talked about in the paragraph? _____
   _____

   What does the author want you to understand about the topic? _____
   _____

3. Cindy found a box big enough for her dog Buff. First she painted flowers on the outside of the box. Then she found an old coat that was too small for her. She put it in the bottom of the box.

   What is being talked about in the paragraph? _____
   _____

   What does the author want you to understand about the topic? _____
   _____

4. Every year Jan plants a garden. She starts the plants in the house in boxes of dirt. When the plants are big enough, she takes them outside. She puts each plant in the dirt and waters it carefully. The plants grow big and give Jan turnips, cabbages, potatoes, and flowers.

   What is being talked about in the paragraph? _____

   _____

   What does the author want you to understand about the topic? _____

   _____

5. The ostrich is the biggest of all the birds, but an ostrich can't fly as other birds do. Its wings are beautiful, but they are not big enough to get the ostrich off the ground. It is just too heavy to fly. A full-grown ostrich may be as heavy as a full-grown tiger.

   What is being talked about in the paragraph? _____

   _____

   What does the author want you to understand about the topic? _____

   _____

Criterion Measure
Context
Spinners

Directions: Read each sentence below and do the following:

1. find the underlined word;
2. circle the word or words in the sentence that gives you a clue to the meaning of the underlined word; and
3. put an x beside the best meaning for the underlined word.

Example: The biplane, an airplane with two wings flies fast.

Biplane means:
____ pilot
____ airplane
____ animal

1. The people in the story lived in miniature houses. They were so small you could hardly see them.

Miniature means:
____ ugly
____ tiny
____ expensive

2. The man went to the store to order a new TV set.

Order means:
____ give directions
____ send for
____ build

3. "I want my food to be fresh," said the woman.

Fresh means:
____ good
____ salty
____ fast

4. The new car was so bright and radiant that I had to shade my eyes.

Radiant means:
____ happy
____ dirty
____ shiny

5. The boy was anxious about his report card because he knew he had not done well.

Anxious means:
____ worried
____ happy
____ pleased

6. The farmers knew they would <u>prosper</u> because they were able to grow lots of crops.

<u>Prosper</u> means:
____ grow up
____ get rich
____ have friends

7. I was sad when my dog died because I was so <u>attached</u> to him.

<u>Attached</u> means:
____ hurt by
____ nailed to
____ fond of

8. The boy <u>crept</u> carefully out on the edge of the cliff.

<u>Crept</u> means:
____ jumped up
____ laughed loudly
____ moved slowly

9. The <u>odd</u> man was walking in the woods and talking to himself.

<u>Odd</u> means:
____ strange
____ big
____ happy

10. The people kept adding on rooms every year until their house was <u>enormous</u>.

<u>Enormous</u> means:
____ pretty
____ large
____ better

Criterion Measure
Main Idea
Weavers

DIRECTIONS: Read each paragraph below and write:

1. the topic of the paragraph (what is being talked about)
2. the author's main message about the topic (what the author wants you to understand about the topic).

1. Insects make their homes in jungles, in deserts, in caves, and on mountaintops. Some kind of insect has been found almost everywhere on the earth. Insects even live in pools of oil, in hot springs, and in places such as tall buildings and ships.

   What is being talked about in the paragraph? _____
   _____

   What does the author want you to understand about the topic? _____
   _____

2. Bees, ants, and some other insects often have special tasks. The queen lays the eggs. Insect nurses feed and care for the young. The nest is protected from enemies by the soldiers. Most of the other insect workers gather food or build and clean the nest.

   What is being talked about in the paragraph? _____
   _____

   What does the author want you to understand about the topic? _____
   _____

3. Caterpillars are insects that hear sounds from the tiny hairs that grow all over their bodies. In fact, most insects hear with tiny hairs. On some insects, these hairs are on the feelers between their eyes. On others, these hairs are found on their legs or on the sides of their bodies.

   What is being talked about in the paragraph? _____
   _____

   What does the author want you to understand about the topic? _____
   _____

4. Some insects fly, leap, or race away from their enemies. Others look similar to the place where they live so their enemies cannot see them easily. Certain insects use powerful weapons, such as horrible odors, poisonous sprays and strings, or painful bites. A few are protected because they look like the insects with weapons. Insects protect themselves in different ways.

What is being talked about in the paragraph? _____
_____

What does the author want you to understand about the topic? _____
_____

5. One particular type of horse is called the Morgan horse. A little over two hundred years ago, a man named Justin Morgan received a young horse from a farmer who owed him some money. When Mr. Morgan trained the horse, he found that it was strong enough to pull heavy loads and that it could run very fast. People were surprised to hear that a horse could do both things well. They began to talk about "Mr. Morgan's horse" until finally horses of that breed came to be known as the Morgan horse. These horses are still known by this name today.

What is being talked about in the paragraph? _____
_____

What does the author want you to understand about the topic? _____
_____

Criterion Measure
Main Idea
Gateways

DIRECTIONS: Read each paragraph below and write:

1. the topic of the paragraph (what is being talked about)
2. the author's main message about the topic (what the author wants you to understand about the topic).

1. The game of basketball was started by James Naismith, a teacher, in 1891. He nailed a peach basket to the wall of a gym. Every time the ball was tossed into the basket, someone had to climb up a ladder to take the ball out. Because this took so much time, the bottom of the basket was taken out.

   What is being talked about in the paragraph? _____
   _____

   What does the author want you to understand about the topic? _____
   _____

2. Each July 4th, the people of the United States celebrate their independence, or freedom. People celebrate in many different ways. Some have picnics and parties. Others may go to see parades and fireworks. Some people display the United States flag from their porches or flagpoles.

   What is being talked about in the paragraph? _____
   _____

   What does the author want you to understand about the topic? _____
   _____

3. Experts recognize three main types of glaciers. An ice cap, the largest type of glacier, grows outward in all directions from the spot in which it was first formed. A valley glacier is a type of glacier that forms at the top of a mountain valley and grows by moving slowly down the valley. The third type of glacier, a piedmont glacier, forms when a valley glacier comes out from a valley, reaches a wide plain, and spreads out over the plain without melting.

   What is being talked about in the paragraph? _____
   _____

   What does the author want you to understand about the topic? _____
   _____

4. Stamp, coin, and rock collections are common hobbies. Some people, however, collect more unusual types of objects. Some persons collect baseball and football cards, or bottle caps. Others enjoy collecting restaurant menus, comic books, and even old bottles. Many different kinds of collecting hobbies are enjoyed by people of all ages.

   What is being talked about in the paragraph? _____

   _____

   What does the author want you to understand about the topic? _____

   _____

5. Traveling on the first steam trains was not comfortable. Because the seats in the passenger cars had no springs or cushions, people were tossed up and down. Passengers were bumped this way and that way whenever the brakes were put on. If the train stopped suddenly, the passengers were tossed about as each car slid against the one just ahead of it. One or two coal stoves were used in each car, but people who sat near them became too hot and those who sat farther away almost froze. After dark, the only light was that given by dim oil lamps.

   What is being talked about in the paragraph? _____

   _____

   What does the author want you to understand about the topic? _____

   _____

Criterion Measures
Context
Skylights

Directions: Read each sentence below and do the following:

1. find the underlined word;
2. circle the word or words in the sentence that gives you a clue to the meaning of the underlined word; and
3. put an x beside the best meaning for the underlined word.

Example: The biplane, an airplane with two wings flies fast.

Biplane means:
____ pilot
____ airplane
____ animal

1. Did you duck under the pole?

Duck means:
____ bend down
____ jump
____ lick

2. She left her umbrella at home.

Left means:
____ a direction
____ forgot
____ called

3. A big crowd came to see the ball game.

Crowd means:
____ a lot of people
____ a man
____ animal

4. Farmer Jones grew a huge head of cabbage last summer.

Huge means:
____ bump
____ empty
____ large

5. The elephant picked up peanuts with his trunk.

Trunk means:
____ long nose
____ suitcase
____ back of the car

6. We put cereal and milk in a bowl and had it for breakfast this morning.

Cereal means:
____ toast
____ oatmeal
____ coffee

7. All the boxes were stacked neatly near the door.

Stacked means:
____ piled up
____ in a mess
____ open

8. A stream of boys and girls came out of the school during the fire drill.

Stream means:
____ a lot
____ truck
____ river

9. Please read the label on this bottle.

Label means:
____ story
____ sign
____ cap

10. I put the watch on my wrist.

Wrist means:
____ bike
____ table
____ arm

Criterion Measure
Context
Weavers

Directions: Read each sentence below and do the following:

1. find the underlined word;
2. circle the word or words in the sentence that gives you a clue to the meaning of the underlined word; and
3. put an x beside the best meaning for the underlined word.

Example: The biplane, an airplane with two wings flies fast.

Biplane means:
____ pilot
____ airplane
____ animal

1. "I don't understand this, let me get it straight," said Jill's mother.

Straight means:
____ clear
____ not crooked
____ good

2. Dan sailed his yacht in the race last Saturday.

Yacht means:
____ motorboat
____ sailboat
____ canoe

3. The shortest route to the store is across the park.

Route means:
____ highway
____ path
____ south

4. The tall and thin cowboy slowly ambled into the bar.

Ambled means:
____ laughed
____ ran
____ walked

5. Josephine went to buy chocolate in the candy stall in the market place.

Stall means:
____ small shop
____ supermarket
____ animalstopping

6. We lowered the awning over the window so the sunlight wouldn't come in.

Awning means:
____ cover
____ paint
____ tool

7. The king looked magnificent in his gold crown, velvet pants and fur robe.

Magnificent means:
____ terrible
____ fantastic
____ ugly

8. We knew there was an emergency when we heard the fire bell and saw the pupils leaving their classrooms.

Emergency means:
____ time of danger
____ holiday
____ meeting

9. Have you been to the warehouse where all the skies, boots, and poles are kept?

Warehouse means:
____ house to live in
____ building to keep extra things
____ truck to move things

10. There were three rehearsals before the play was performed for our parents.

Rehearsals means:
____ groups
____ stages
____ practices

Criterion Measure
Context
Gateways

Directions: Read each sentence below and do the following:

1. find the underlined word;
2. circle the word or words in the sentence that gives you a clue to the meaning of the underlined word; and
3. put an x beside the best meaning for the underlined word.

Example: The biplane, an airplane with two wings flies fast.

Biplane means:
____ pilot
____ airplane
____ animal

1. Because she chaired the meeting, Judy had to tell everybody what to do.

Chaired means:
____ thought about
____ led
____ nervous

2. The man hit the ground harder with the pick so that he could dig the hole deeper.

Pick means:
____ a dumptruck
____ ball
____ a digging tool

3. When the fish hit the line, the fisherman cried, "I've got a strike!"

Strike means:
____ a fish
____ a baseball game
____ a friend

4. The man was so destitute that he did not even have enough money to buy dinner.

Destitute means:
____ tired
____ poor
____ happy

5. Mary carried the delicate flower very carefully.

Delicate means:
____ large
____ pretty
____ easily broken

6. The garbage truck picked up all the refuse and took it to the dump.

Refuse means:
____ people
____ junk
____ houses

7. The strong man at the circus pounds on the drum until it breaks.

Pounds means:
____ hits
____ thinks
____ eats

8. The down lining of the coat was soft and warm when I put my face against it.

Down means:
____ lower than
____ made of feathers
____ pretty

9. My clock stopped so I had to wind it.

Wind means:
____ blow it away
____ turn the spring around and around
____ stop

10. As part of the shooting practice, the airplane shot down the drone.

Drone means:
____ target
____ person
____ a sound

Criterion Measure
Punctuation
Skylight

Directions: In each sentence below, one or more marks of punctuation have been noted with an arrow (↓). For each sentence, decide what the noted punctuation mark means and choose the best reason from the list below. Put in the blank in front of the sentence the number of the reason which best says what the noted punctuation mark means.

1. This punctuation mark means that things are listed.
2. This punctuation mark tells you something important is coming and that you should pause.
3. This punctuation mark shows that someone has not finished her or his thought or sentence.

___ 1. I have to buy a lot for the party↓: a cake, drinks, cups and paper plates.

___ 2. Don't bother me ↓— I'm taking a nap.

___ 3. The camp sent a list of clothes to bring↓: swimming suit, shorts, a sweatshirt, jeans and T-shirts.

___ 4. Walk ↓— don't run.

___ 5. We don't like liver, but that's for dinner so..↓.

___ 6. Before landing the pilot checked his list of things to do↓: lower wheels, check flaps and check air speed.

___ 7. So that's why you're late ↓— you were buying me a present.

___ 8. Jane's mother is ill and she can't go, so..↓.

___ 9. When we see the sign we turn, and then..↓.

Criterion Measure
Punctuation
Spinners

Directions: In each sentence below, one or more marks of punctuation have been noted with an arrow (↓). For each sentence, decide what the noted punctuation mark means and choose the best reason from the list below. Put in the blank in front of the sentence the number of the reason which best says what the noted punctuation mark means.

1. This punctuation mark means the end of the sentence.
2. This punctuation mark means that a question is being asked.
3. This punctuation mark means that the speaker is excited.
4. This punctuation mark shows the exact words that someone is speaking.
5. This punctuation mark means that a person is being spoken to.

___ 1. Mother will buy a book.↓ She will give it to Bob.

___ 2. Do you know me?↓ I am your friend.

___ 3. Jack won the prize. Oh, was he happy!↓

___ 4. Mary,↓ you need to call your mother.

___ 5. ↓"Look at me,"↓ said Dick.

___ 6. Where are you going,↓ John?

___ 7. The dog went to the barn.↓

___ 8. How beautiful the sunset is!↓

___ 9. Mother said, ↓"Don't do that."↓

___ 10. Where are you going?↓

___ 11. Mary,↓ are you feeling okay?

___ 12. ↓"The car is really nice,"↓ cried Sue.

___ 13. Where do we go from here?↓

___ 14. The school is new and different.↓

___ 15. I feel awful!↓

Criterion Measure
Punctuation
Weavers

Directions: In each sentence below, one or more marks of punctuation have been noted with an arrow (↓). For each sentence, decide what the noted punctuation mark means and choose the best reason from the list below. Put in the blank in front of the sentence the number of the reason which best says what the noted punctuation mark means.

1. This punctuation mark shows two words have been combined.
2. This punctuation mark tells who possesses or owns something.
3. This punctuation mark shows a title.
4. This punctuation mark shows the exact words someone speaks.

___ 1. "Have you got the book?" asked Sam.

___ 2. Do you know the song called "Down By The Old Mill Stream"?

___ 3. Mary says she's going with us.

___ 4. The man said, "I didn't do it right."

___ 5. Did you see the movie "War Games"?

___ 6. I haven't had time to write a letter.

___ 7. "Thanks for coming, Debbie."

___ 8. I was reading the article "Animals in Africa," when the telephone rang.

___ 9. The monkeys' food was put inside their cage.

___ 10. The boy's bike was broken.

___ 11. The books' covers were torn.

___ 12. The bird's wing was broken.

___ 13. All the girl's shoes had been put outside the door.

___ 14. Tim's dog is brown and white.

___ 15. They've finished their homework.

Criterion Measure
Punctuation
Gateways

Directions: In each sentence below, one or more marks of punctuation have been noted with an arrow (↓). For each sentence, decide what the noted punctuation mark means and choose the best reason from the list below. Put in the blank in front of the sentence the number of the reason which best says what the noted punctuation mark means.

1. This punctuation mark means that someone owns something.
2. This punctuation mark means that some letters have been left out.
3. This punctuation mark means that someone is being spoken to.
4. This punctuation mark means that the words are being listed.
5. This comma sets apart the explanation of who the person is.
6. This punctuation mark introduces something.
7. This punctuation mark means that a connecting word has been replaced.
8. This punctuation mark shows the exact words of a speaker.

___ 1. Where are your friends↓' bikes?

___ 2. Will you be goin↓' soon?

___ 3. Billy,↓ where did you go?

___ 4. Go to the store,↓ Mary.

___ 5. I found big apples,↓ oranges,↓ and bananas.

___ 6. John,↓ my best pal,↓ is moving away.

___ 7. I got the following things at the store:↓ a shirt, a pair of pants and a pair of shoes.

___ 8. ↓"Okay,"↓ said Dad, ↓"but I don't like it."↓

___ 9. Mike↓'s bike is being fixed.

___ 10. The boy↓'s house was down the street.

___ 11. The lady can↓'t get her door shut.

___ 12. It↓'s going to rain today.

___ 13. What did you buy,↓ Mary?

___ 14. Sam,↓ will you help me?

___ 15. The man bought two books,↓ five pairs of pants,↓ and a hat.

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___ 16. There were plates↓, spoons↓, glasses↓, and napkins on the table.

___ 17. Mary↓, the girl next door↓, is coming over.

___ 18. The dog named Dan↓, who was found near the park↓, was very friendly.

___ 19. There are these things in the sink↓: dishes, silverware, a dishcloth and five glasses.

___ 20. I bought two kinds of ice cream↓: vanilla and chocolate.

___ 21. I will drive you↓; you don't have to walk.

___ 22. The dog caught the cat↓; they fought.

___ 23. After the game, Jeff and John met near the house↓; they went to the store.

___ 24. ↓"The animal,"↓ I shouted, ↓"has gotten loose."↓

___ 25. Mother cried, ↓"I have to go to the store before I meet you."↓

Appendix E

The Graded Oral Reading Paragraph Test

Field-Tested in 1983-84

Adapted from Durr, W. (1983). Placement Test, Houghton Mifflin Reading Series. Boston: Houghton Mifflin.

Name_____

Reading Teacher_____

Date_____

Total Time_____

1.	earth	hour	fire	egg	catch
2.	king	pass	act	milk	blew
3.	touch	form	plane	eight	reach
4.	thick	base	warm	tale	final
5.	port	fresh	train	women	spoon
6.	check	island	complete	notice	usual

When the young skunks were eight weeks old, the mother skunk took them on their first hunt. It was at night. Skunks hunt at night and sleep in the day.

The young skunks followed along behind their mother in a single line, their bushy tails held up high. Skunk Baby was the last in line.

The mother skunk took her family along a path at the edge of the woods. She was taking them to the pond in the meadow.

The moon was shining down through the trees. The mother skunk stopped by a log. With her sharp, strong claws, she dug at the ɔtting wood.

She uncovered some small grubs and snapped them up. Skunk Baby tasted a fat grub and licked his lips.

Suddenly the skunks heard a strange noise at the other end of the log. A round, bristly-looking animal walked past.

The mother skunk did not even look at the old porcupine. She was not afraid of him. He was not an enemy. She gave her young a sign to follow her. And off the family waddled down the path and toward the pond.

From the pond came the song of the frogs. Under rocks and leaves, crickets rubbed their wings together, making a cheerful, chirping sound.

The frogs' singing grew louder. The skunks were almost at the pond.

Suddenly there was a soft, swishing sound overhead. A great horned owl swooped down.

The owl was a dangerous enemy! The mother skunk stamped her front feet. Her family quickly scrambled under a thorny bush.

The branches were so full of sharp thorns that it was impossible for the owl to land. Soon it hooted and flew away.

When she was sure it was safe, the mother led her family to the pond. They walked to the edge and drank the cool water.

Student Number_____
Date_____

Graded Oral Reading Paragraph Assessment

___ 1. When the young skunks
___ 2. were eight weeks old
___ 3. the mother skunk took them on their first hunt.
___ 4. It was at night./Skunks hunt at night
___ 5. and sleep in the day. 30
___ 6. The young skunks followed along behind their mother
___ 7. in a single line, 55
___ 8. their bushy tails held up high.
___ 9. Skunk Baby was the last in line.
___ 10. The mother skunk took her family along a path at the edge of the woods.
___ 11. She was taking them to the pond in the meadow. 80
___ 12. The moon was shining down through the trees.
___ 13. The mother skunk stopped by a log.
___ 14. With her sharp, strong claws,
___ 15. she dug at the rotting wood.
___ 16. She uncovered some small grubs
___ 17. and snapped them up.
___ 18. Skunk Baby tasted a fat grub
___ 19. and licked his lips. 125
___ 20. Suddenly the skunks heard a strange noise
___ 21. at the other end of the log.
___ 22. A round, bristly-looking animal walked past. 146
___ 23. The mother skunk did not even look
___ 24. at the old porcupine.
___ 25. She was not afraid of him.
___ 26. He was not an enemy.
___ 27. She gave her young a sign to follow her.
___ 28. And off the family waddled
___ 29. down the path and toward the pond. 189
___ 30. From the pond came the song of the frogs.
___ 31. Under rocks and leaves,
___ 32. crickets
___ 33. rubbed their wings together,
___ 34. making a cheerful, chirping sound. 212
___ 35. The frogs' singing grew louder.
___ 36. the skunks were almost at the pond. 224
___ 37. Suddenly there was a soft, swishing sound
___ 38. overhead.
___ 39. A great horned owl
___ 40. swooped down. 238
___ 41. The owl was a dangerous enemy!
___ 42. The mother skunk stamped her front feet.
___ 43. Her family quickly scrambled
___ 44. under a thorny bush. 259
___ 45. The branches were so full of sharp thorns
___ 46. that it was impossible for the owl to land.
___ 47. Soon it hooted
___ 48. and flew away. 282
___ 49. When she was sure it was safe,
___ 50. the mother led her family to the pond.
___ 51. They walked to the edge
___ 52. and drank the cool water. 307

Student_____
Date _____

GORP REPORTING FORM

I. Sight words (total 30)

tried _____
skipped _____
pronounced wrong _____
pronounced correctly _____

II. Pronounced "grub" as _____ decoded correctly? _____

Used in following sentence _____
_____

/_____/ No sentence given Meaning Correct? _____

/_____/ Sentence inaudible

III. Read selection

Fluency Measure _____
(Average of four A.V. ratings below)

	1	2	3	4	5	6	7	8	9	10	11	12
Intonation												
Smoothness												
Obeys punct.												
Phrasing												

IV. Total words read _____ (307 in selection).

V. Time used

_____ Total time for passage.
_____ Total recall time.

VI. Miscues

Total miscues

	Total	Make Sense	Didn't
Pronunciation errors			
Not corrected			
Self corrected			
Omitted			
Teacher pronounced			

VII. Recall

_____ memory units of 52.
Did tester probe: _____Yes _____No Comments:_____
_____

Student No. _____

Date _____

VIII. Strategies

A Self Strategies

Words Ask For	Student Response	Decode Attempted	Decode Success	Tester Pronounced	Meaning Attempted	Meaning Success	Comments

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B Embedded strategies

	Context Decode	(grub) Meaning
Asked for		
Attempted		
Success		

	Prefix decode	(uncovered) Meaning
Asked for		
Attempted		
Success		

LR045/E

Appendix F

Teacher Interview Protocols

Teacher Interviews #1

Instructions to Interviewers

1. Schedule your first interview with Treatment teachers as soon as possible. After school is the most desirable time to allow 1 hour for the interview. If a teacher cannot meet after school, schedule for a lunch time or probe for other times the teacher can meet with you (e.g., part of a planning day)

2. Time constraints will make it important that you keep the lesson focused on the format of questions attached.

3. Be sure to tape record the interview. Linda will have labeled tapes available. Make sure your recorder is operating properly in advance of your interview.

4. Clarify whether the teacher is a first or second year treatment teacher.

5. The major outcome of the interview is to probe the teachers' knowledge base about teacher explanation.

6. General probes useful in encouraging the teacher to elaborate on brief responses:

   - Explain that to me
   - Tell me more about it
   - I'm not sure what you mean; can you give me an example?

7. Following your interview, with the tape remaining on side 2 of the audio tape, record a brief summary narrative of your overall impression of the interview.

Teacher Interview #1

Questions

The first interview conducted with Treatment teachers will follow the format below:

I. Background Information

A. Name
B. Current grade
C. Years at this level
D. Other grades taught
E. Years at other levels
F. Describe the variety (kinds) of reading lessons you teach?
G. What texts are presently being used in your room (with the low group particularly)?

II. Explanation (Clarify whether the teacher is a first or second year treatment teacher)

A. Think about your daily skill lesson for a moment:

1. How are the skill lessons you are teaching now different from the ones you taught before your participation in our project?
2. How are they similar? If different, to what do you attribute the differences?
3. PROBE: Using the guide (attached) of important components, ask the following questions about any components the teacher did not volunteer comments on the questions.
   A. 1-2. (Continue probing until all components are covered)
      1) Have you been using _____? How have you been using it in lessons?
      2) Is this different from the way you taught before?
4. Which components do you do well? Which less well? How can we help you in the weaker areas?

B. Do you find yourself teaching skill lessons differently on the days you're not observed? How? (Probe and emphasize the importance of daily implementation)

C. Are there certain skills or activities you decide not to use explanation behavior with? Are you selective in use of explanation? If yes, why?

III. Student Awareness and Achievement

A. Student Awareness - think about your students now and in early fall.
1. Do your students seem to be more aware of the way reading skills are used? (Probe - can you tell me about it; what do you define as awareness? How evident is this awareness?)
2. How is this awareness different than the behavior you observed in the early fall?

B. Student Achievement
   1. Do your students seem to be achieving more? Explain. Tell me about that. (Probe - Upon what evidence is this assessment based? How evident is this better achievement?)
   2. How is this achievement different than the behaviors you observed in the early fall? (Probe for strategic mental processing as an achievement outcome as opposed to correct answers)

IV. Staff Development

Think about the interventions a moment. Remind them about nature of each intervention (where held) if they need prompt.

1. What helped you the most?

2. What could have been improved?

3. What kind of further assistance would you find helpful? (Probe - tell me about it)

(4/26/84)

Teacher Interview #2

Instructions to Interviewers

1. Schedule your first interview with Treatment teachers as soon as possible. After school is the most desirable time to allow 1 hour for the interview. If a teacher cannot meet after school, schedule for a lunch time or probe for other times the teacher can meet with you (e.g., part of a planning day).

2. Time constraints will make it important that you keep the interview focused on the format of questions attached.

3. Be sure to tape record the interview. Linda will have labeled tapes available. Make sure your recorder is operating properly in advance of your interview.

4. Read in the name of the teacher, current grade and school.

5. Clarify whether the teacher is a first or second year treatment teacher.

6. The major outcomes of the interview are to gather information about ways to improve next year's study and to probe the teachers' knowledge base about the strategic aspects of teacher explanation.

7. General probes useful in encouraging the teacher to elaborate on brief responses:

   - Explain that to me
   - Tell me more about it
   - I'm not sure what you mean; can you give me an example?

8. Following your interview, record on the tape a brief summary narrative of your overall impression of the interview.

9. Materials needed for the interview are included in your packet and include:

   a. list of components in a skill lesson.
   b. students listed by number of times interviewed.
   c. tape and extra = 2 tapes.

(4/26/84)

Teacher Interview #2

The second interview conducted with 83-84 Treatment teachers will follow the format below: Keep the times on left in mind to keep interview around one hour.

(5-10 min) I. Background Information

A. Is your present teaching assignment (grade, building, subjects taught) the same as last year?
If YES, continue with interview.
If NO, probe for differences and descriptions of current assignments.

B. Consider your organizational and management procedures for this year:

1. What relationships do you see (if any) between teacher explanation behavior and your management of instruction?
PROBE: Describe examples.

2. What relationships do you see (if any) between teacher explanation behavior and your management of student behavior?
PROBE: Describe examples.

(10 - 15 min.) II. Staff Development

A. Think about the interventions for a moment. They generally contained a feedback session, a large group session and a coaching session.

1. What helped you the most?

2. What could have been improved?
PROBE for any of the following elements not mentioned:
--- what about ---

(a) Feedback sessions:
Use of transcripts of lessons, interviews
(b) Large Group Sessions:
Video tapes
Content lectures, discussions
(c) Coaching Sessions:
Planning for lessons, units

B. What relationship(s) (if any) do you see between the basal text or Lansing curriculum requirements and teacher explanation? Explain.
PROBE: (1) Be sure teacher mentions name of basal used this year.
(2) Did you experience any conflicts between the two?
If YES, probe for description of conflicts.
If NO, continue with interview.

C. (For Second Year Treatment Teachers only)
Compare the interventions from last year with this year.

1. What were the most helpful aspects (components) of each of those experiences?

2. Which set of interventions was more helpful?
   PROBE: For whichever set they pick as better:
   (a) What were the advantages?
   (b) What were the disadvantages?

(15 min.) III. Explanation (Clarify whether teacher is a first or second year treatment teacher

A. Think about your daily skill lesson for a moment: We'll talk about planning first, then actual instruction.

1. Describe the planning you do for using explanation behavior in skill lessons.

   a. Is written planning same, more, less than before you used explanation behavior?
      PROBE: If more/less, tell me about it.
   b. What level of written detail do you feel comfortable with?
   c. Do you use these written details during instruction?
      1. If NO, what cues do you use? (ex., notes, worksheets, teacher's guide)
      2. If YES, describe.

2. When planning for a skill lesson, how do you plan a lesson for strategic mental processing (mental steps you take students through to do a task)?
   PROBE: USE THE GUIDE ATTACHED of important components of the lesson, ask the following questions about any component the teacher does not voluntarily mention:
   (a) Have you been planning for strategic mental processing in _____?
   (b) Is this different from the way you planned before? (Describe)

3. (Ask if not discussed above) What do you want to accomplish during the interactive phase?

B. Now think about your actual instruction in skills using plans you've developed:

1. Which components of the lessons do you feel most comfortable with? Why?

2. Which components of the lessons are still causing you concern? Why?

3. PROBE: Using the guide attached of important components of the lesson, ask the following questions about any components where the teacher did not volunteer comments on the strategic mental processing.
   1-2 (Continue probing until all components are covered)
   (1) Within _____ how have you used strategic mental processing?
   (2) How does this compare to the way you taught before?

C. Do you find yourself teaching skill lessons differently on the days you're not observed? How? (Probe for the reasons why if there is a difference)

D. Are there certain skills or activities you decide not to use explanation behavior with? Are you selective in use of explanation? If yes, why?

(10 min) IV. Student Awareness and Achievement

Think about your students now and in early fall.

A. Student Awareness

1. Do your students seem to be more aware of the way reading skills are used? (Probe - can you tell me about it; what do you define as awareness? How evident is this awareness?)

2. How is this awareness different than the behavior you observed in the early fall?

(Note: Adjust questions in item 3 to fit your student interview situation. Use the class list as a reference)

3. Consider your students involved in the observed group; are there any differences in:
   a. those interviewed each observation and others?
   b. those interviewed once or twice and others?
   c. those not interviewed at all?

B. Student Achievement

1. If you were talking to a colleague, what would you tell them about why explanation is important to do with your students?

2. Do your students seem to be achieving more? Tell me about that.
   PROBE: (a) Upon what evidence is this assessment based?
   (b) If better, how evident is this better achievement?

3. How is this achievement different than the behaviors you observed in the early fall?
   PROBE: (a) What kind of outcomes are you after?
   (b) What tells you if students have learned successfully?

4. Name the skill you taught most successfully. What made your teaching of that skill so successful? Explain.

(10 min.) V. Questioning Behaviors

Now consider the questions you ask your students during skill instruction:

A. What role do questions play in your skill lessons?

B. Compare the questioning you use in an explanation skill lesson to other kinds ofreading lessons you teach (e.g., basal story lessons, vocabulary building lessons, etc.)

C. Do you consider yourself a high/low user of questions? Explain.

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D. Has explanation changed how you ask (include) questions in SS lessons?
PROBE: When in these lessons do you ask the most questions? least questions?

E. During which part of an explanation lesson do you feel questions is most important? Why?
PROBE: What purpose do questions serve in this part of the lesson?
(If NOT mentioned, ask about interactive phase--what do you try to accomplish with your questioning in the interactive phase?)

(3 min.) VI. Conclusion

A. What things do you feel have contributed to your using explanation as effectively as you have?

B. What things (if any) have hindered your progress?

C. If you could do this year over what would you do differently to increase the likelihood of your being more successful?

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for teacher interview & use for Part III as noted

Checklist

Explicit Explanation of Reading Strategies

	Absent	Somewhat Present	Present
I. Information Presented			
A. Mental Process- states what is to be learned.			
B. Usefulness- states when skill is useful and why important to learn			
C. Features- states/cues salient elements of skill.			
D. Sequence:			
1. states order in which elements are used.			
2. states where this skill fits into other skills.			
E. Example-gives appropriate examples of skill being used.			
II. Means for Making Clear			
A. Explanation of Information:			
1. states or elicits from students what, why and how-- highlighting the mental processing.			
2. models the mental processing needed to use the skill.			
3. briefly summarizes/reviews what was explained.			
B. Interactive Phase:			
1. Elicits responses which require students to do the mental processing.			
2. Elaborates on correct and incorrect responses with cues, directives and supportive feedback.			
3. Fades cues and moves from directives to questions about student responses.			
4. Completely fades cues and gives supportive feedback and non-examples.			
C. Practice/Application:			
1. Provides practice using the mental processing in connected text.			
2. Guided Application: directs students to use strategy in next basal selection.			
3. Independent Application: directs students to use strategy when reading other materials for pleasure or information			

Appendix G

Revised Rating Form For Explanation

1984-85 Teacher Explanation Project

November 1, 1984

1. Information Presented about the Strategy

1. Rate how explicit the teacher is in informing students that the task to be learned is a strategy for solving a problem encountered in reading.

0--the teacher makes no statement about what is to be learned (total absence of...).

1--the task is named/labeled but there is little information beyond "we will learn about prefixes..."

2--the task is named/labeled and there is some elaboration <u>beyond</u> "we will learn about prefixes..."

3--the task is described as an adaptive, flexible strategy ("we will learn how to...") but it is not an exemplar.

4--an exemplary presentation of the task is an adaptive, flexible strategy to solve a problem encountered when reading.

1.2. Rate how explicit the teacher is in informing students that the strategy is useful as they read.

0--there is no statement of where the skill would be used (total absence of...).

1--the teacher only mentions that the skill is generally useful or useful in reading but does not specify why or when.

2--the usefulness of the task is related to the future ("when you get in sixth grade...") or is vague or general in stating why or when it is related to particular text ("it helps you get information...").

3--the immediate usefulness of the skill is illustrated with a specific reference to a particular example but it is not an exemplar.

4--an exemplary statement of the immediate usefulness of the skill in reading connected text in which one or more concrete examples are used to illustrate.

1.3. Rate how explicit the teacher is in telling students how to decide which strategy to select for use when encountering a problem in reading.

0--there is no mention that students will have to select a strategy to solve the problem (total absence of...).

1--the teacher mentions that this skill can be used to solve a problem but provides no additional information.

2--the teacher mentions that this skill can be used to solve a problem and provides some information about how to choose the appropriate strategy.

3--the problem situation is explicitly specified and how to select an appropriate strategy is emphasized but it is not an exemplar.

4--an exemplary statement of how to recognize that a problem exists and how to select the appropriate strategy.

1.4. Rate how explicit the teacher is in telling students how to perform the strategy to solve the problem when reading real text.

0--there is no explanation of how to perform the strategy (total absence of...).

1--there is an explanation but it is stated as a rule to be memorized or as a procedure to be recalled and no examples are provided.

2--the teacher talks about the rule and/or procedure as a routine to be applied without variation and examples are provided.

3--the teacher shows students how to follow mental steps and a sequence in a flexible, adaptive manner but it is not an exemplar.

4--an exemplary description in which the teacher shows students how to follow mental steps and a sequence flexibly and adaptively when performing the strategy.

II. The Means Used to Present the Information

2.1. Rate how explicit the teacher is in introducing the lesson.

0--the teacher makes no introductory statements or overview regarding the lesson (total absence of...).

1--the teacher makes an introductory or overview statement about what is to be learned, but does not mention why or how.

2--the teacher makes an introductory or overview statement about what is to be learned and either why or how (but not both).

3--the teacher makes an introductory or overview statement that includes information about what, why and how, but it is not an exemplar.

4--the teacher makes an exemplary introductory or overview statement about the strategy to be learned, the "real text" situation in which it will be applied and what to attend to when using it.

2.2. Rate how explicit the teacher is in modeling for students the mental steps in identifying the problem, selecting the strategy, and applying the strategy.

0--the teacher does not model how to do the task at any point in the lesson (total absence of...).

1--the teacher models procedural use of a rule.

2--the teacher models the steps to be followed as a procedure but does not make the invisible visible.

3--the teacher models mental steps in using the strategy adaptively (makes the invisible visible) but uses artificial text samples or otherwise is not an exemplar.

4--the teacher provides an exemplary model of how to use mental steps in applying the strategy adaptively to a sample of natural, connected text.

2.3. Rate how well the teacher shifts the instructional interaction from teacher regulation of the strategy to student control of the strategy.

0--the teacher does not provide any guided practice (total absence of...).

1--the teacher requires the students to provide answers to tasks which presumably call for the use of the skill (in a recitation or assessment mode).

2--the teacher moves from teacher regulation to student regulation but the emphasis is on answers rather than student mental processing.

3--the teacher moves from teacher regulation to student control and emphasizes student mental processing rather than answers, but it is not an exemplar.

4--the teacher provides an exemplary series of trials which are characterized by increased student mental processing, by much teacher assistance early in the lesson, by teacher monitoring of students use of mental processes, by gradual diminishing of assistance as the lesson progresses, and by making reference to the monitoring of student responses in asking for subsequent responses.

2.4. Rate how well the teacher elicits responses which require students to verbalize how they arrived at their answer.

0--the teacher does not elicit student responses to the skill of the task (total absence of...).

1--the teacher elicits right answers and does not require students to state how they know the answer.

2--the teacher requires students to state how they got answers but focuses on precedural recall rather than knowing how to get the answer.

3--the teacher requires students to explain how they got the answer but has individual students verbalize individual steps rather than having each student verbalize all the steps, or otherwise fails to be an exemplar.

4--the teacher's elicitations are exemplary, requiring each student to verbalize all the mental steps used in applying the skill strategically.

2.5. Rate how well the teacher brings closure to the observed lesson (or lesson segment).

0--there is no evidence of closure to the lesson (total absence of...).

1--the teacher ends the lesson but makes no summary statement about the skill being taught.

2--the teacher makes a summary statement but does not include all information (the what, the why and the how).

3--the teacher ends the lesson with a summary statement about what was learned, why it was learned and how to do it (but does so without student involvement or otherwise fails to be an exemplar).

4--the teacher provides exemplary closure by involving students in summarizing and/or in reviewing, or in using the skill strategically in natural connected text, or by reminding them that it is in such natural connected text that the skill will be used.

III. Intra- and Inter-Lesson Cohesion

1. Rate how successful the teacher is in bringing a sense of cohesion to the lesson.

0--there is no recognizable sequence or cohesion within the lesson (total absence of...).

1--the teacher's lesson has some evidence of a logical sequence but there are frequent inconsistencies and breaks.

2--the teacher's lesson reflects a logical progression but contains some inconsistencies or breaks in lesson focus or breaks in activity flow.

3--the lesson has structure, is consistent, is focused and flows smoothly but is not an exemplar.

4--the teacher provides a lesson which is exemplary in terms of internal structure, consistency, focus and flow.

2. Rate how successful the teacher is in communicating a sense of cohesion with past and future lessons.

   0--there is not recognizable connection to past and future lessons (total absence of...).

   1--the teacher refers to past lessons but makes no reference to future lessons or refers to future lessons but makes no reference to past lessons.

   2--the teacher refers to past and future lessons but there is little evidence of cohesion.

   3--the teacher refers to past and future lessons, achieves some cohesion across lessons, but it is no exemplar.

   4--the teacher provides an exemplary lesson in terms of its cohesion across lessons.